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## ATTACHMENT 1

## **CleanCARE—Investing in Communities**

In developing the successor standard contract or tariff to the current net energy metering (NEM) tariff, Assembly Bill (AB) 327 requires the Commission to “[e]nsure that the standard contract or tariff made available to eligible customer-generators ensures that customer-sited renewable distributed generation continues to grow sustainable and include specific alternatives designed for growth among residential customers in disadvantaged communities.” Pub. Util. Code § 2827.1(b) (emphasis added). IREC proposes a new California Alternate Rates for Energy (CARE) rate option—CleanCARE—as one of those specific alternatives. Under CleanCARE, low-income and medical baseline customers would receive access to affordable renewable energy. The CleanCARE framework would also provide these customers with a clearer connection between cost-causation and energy usage. CleanCARE could complement other alternatives proposed by other parties.

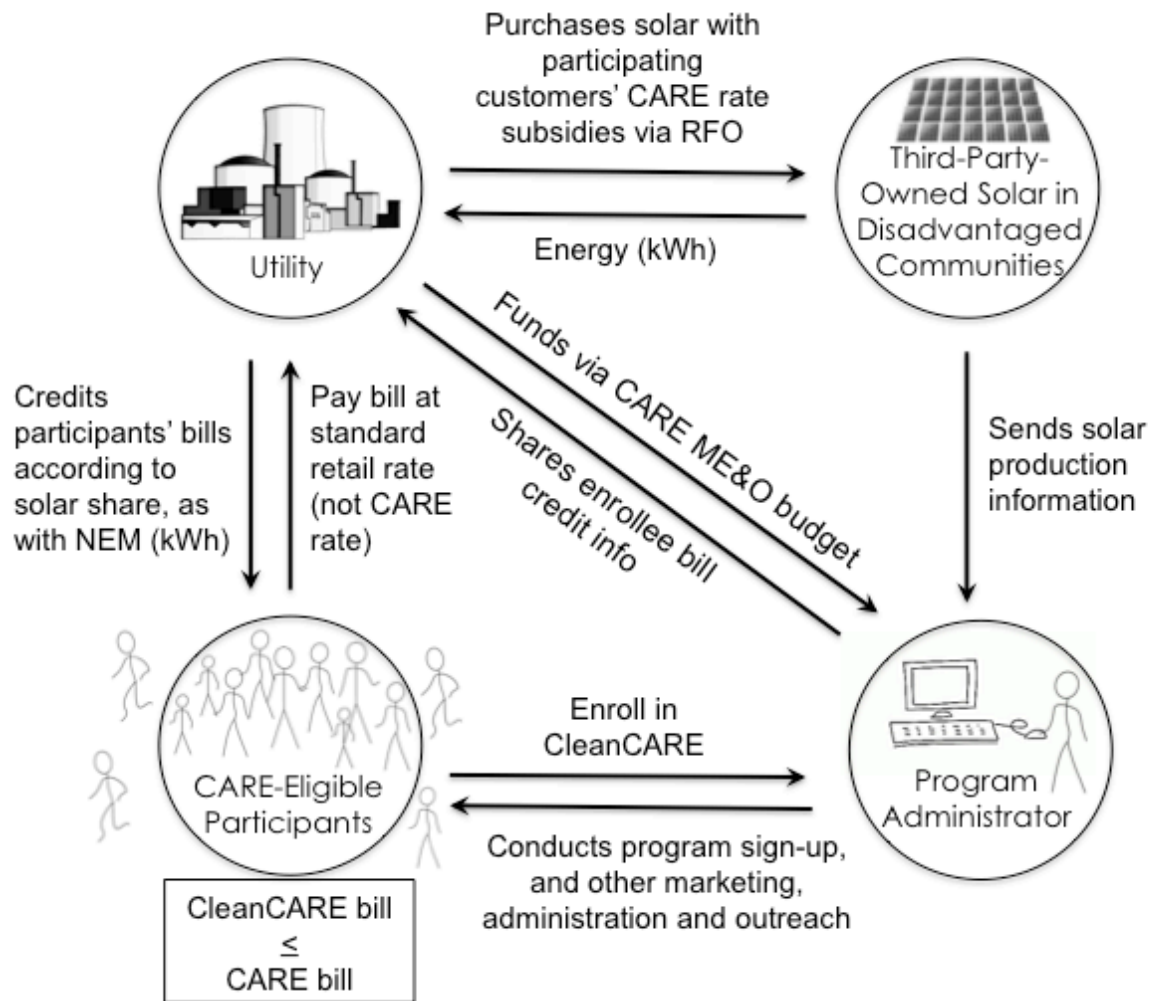
CleanCARE would allow a portion of the funds allocated toward CARE rate reductions to be invested in the development of shared distributed renewable generation by a third-party entity. CARE customers electing the CleanCARE option would move to the standard rate for the rate class and through participation in the CleanCARE program would offset a portion of their monthly bills through kilowatt-hour (kWh) bill credits. As a result, a CleanCARE customer would receive the equivalent or a lower bill than the customer would have seen under the standard CARE program rates. In this way, the CleanCARE option would increase opportunities for low-income households to participate in renewable energy programs while guaranteeing at least the average rate levels and benefits of the current CARE program and being revenue-neutral for ratepayers. IREC proposes a third-party-administered program, initially relying on five MW of pilot project capacity and, if successful, expanding to serve more customers with more renewable energy. CleanCARE could also be expanded to incorporate energy efficiency, energy storage and demand response to decrease participants’ bills via usage reductions as well as NEM bill credits.

The CleanCARE program can effectively serve to increase access to renewable energy for customers in “disadvantaged communities” and result in new renewable energy facilities sited in those communities. IREC intends this proposal to be a starting point for discussion on the manner in which a CleanCARE program option could meet these goals. IREC has already solicited and incorporated feedback from a variety of stakeholders and organizations, and looks forward to continuing to discuss this program concept.

### **How would CleanCARE work?**

Currently, the CARE program provides discounted electricity and gas rates for over 3 million low-income enrollees. Because the CARE program is structured as a direct rate discount, however, it provides very limited opportunities for enrollees to participate in California’s renewable energy programs. CleanCARE would provide an option to redirect a portion of the current CARE program funds associated with this rate discount toward purchasing renewable generation from a third-party developer for the benefit of CARE-eligible customers.

## Overview of CleanCARE Concept



**Relationship to existing CARE program:** Fundamentally, CleanCARE relies on the funding associated with the CARE rate discount to support investment in renewable energy generation for the benefit of participants via kilowatt-hour (kWh) bill credits. Participants in CleanCARE would have to meet the eligibility requirements for CARE but would choose CleanCARE's alternative bill reduction option instead of receiving the CARE rate discount, which would guarantee them the same or better bill reductions as they would receive under CARE rates. Thus participants in CleanCARE could still be considered part of the CARE program, and CleanCARE would support rather than undermine efforts to reach eligible CARE customers and achieve CARE penetration goals. In addition, CleanCARE would rely on the CARE administrative budget, in particular with respect to marketing, education and outreach, and leverage existing efforts to minimize costs.

**Disadvantaged communities:** AB 327 does not define the term "disadvantaged communities." In this instance, IREC believes that it would be appropriate to use the most recent version of the California Communities Environmental Health Screening Tool (CalEnviroScreen) to identify the 25 percent of census tracts that represent the most disadvantaged communities, and that there

may be other areas or groups of customers that should qualify as “disadvantaged communities” under AB 327 as well. The census tracts identified by CalEnviroScreen should represent a significant percentage of the State geographically and include many potential sites for solar development. Based on an initial exploration of census data, IREC expects that there is significant overlap between CARE enrollment and customers living in “disadvantaged communities,” but recognizes that (1) some CARE customers do not live in these communities and (2) some customers in these communities are not eligible for the CARE program. Nonetheless, IREC believes that CleanCARE would reach a significant customer segment in “disadvantaged communities.” In addition, CleanCARE would incorporate a requirement that all of the renewable energy facilities associated with the program be located within “disadvantaged communities,” as discussed below.

IREC further notes that, based on the data we have gathered to date, many CARE-eligible customers are renters who cannot install on-site renewable generation. CleanCARE would provide an option for these customers to participate in renewable energy. CleanCARE would be offered to both CARE-eligible renters and homeowners, and some homeowners may find it to be a more attractive option. CleanCARE would complement California’s successful Single-family Affordable Solar Housing (SASH) and Multi-family Affordable Solar Housing (MASH) programs by increasing program options for low-income customers. CARE-eligible customers living in single-family homes may be able to choose between the SASH program and CleanCARE, for example. In some regions, up to 40 percent of eligible SASH clients have properties that are not suitable for solar, for example due to shading issues or roofs in need of replacement. Likewise, CARE enrollees in multifamily housing may be able to choose between MASH and CleanCARE. Together with SASH and MASH, CleanCARE would expand the options for low-income customers to benefit from renewable energy generation. A customer’s choice would depend on program eligibility requirements, and the customer’s particular situation, needs and preferences, including whether the customer is more interested in on-site or shared renewable generation.

**Optional program, starting on a pilot basis:** IREC proposes that CleanCARE be introduced on a pilot basis, with voluntary, limited enrollment in particular regions of the state, for example those with high levels of participation in the current CARE program or large numbers of enrollees who have higher energy usage. As discussed below, CleanCARE is likely to be most attractive to Tier 3 CARE customers and potentially Tier 2 CARE customers, as well, especially in future years. Alternatively, CleanCARE could begin with enrollment in a region with the highest proportion of CARE customers in “disadvantaged communities,” as the Commission defines them under AB 327. This framework would allow for identification of sites for the “in-community” renewables and focus outreach efforts on a particular region. Other means of creating a sample customer base for a pilot program could also be developed with input from interested parties. Marketing and outreach for the program would be closely coordinated with entities with experience in this area, including Grid Alternatives, state weatherization program experts, and other community-based organizations to identify the most effective strategies and ensure positive uptake.

IREC proposes that the pilot program capacity be limited to 5 MW total—2 MW of smaller-sized projects (20-40 projects) and 3 1-MW projects. If the first year pilot (e.g., 2016) is

successful, then the program would be expanded to incorporate more renewable energy to serve more customers, for example an additional 20 MW in 2017 and 25 MW in 2018. In addition, energy efficiency, energy storage and demand response could also be incorporated, as discussed below.

**Program administration:** IREC suggests that a third party administer the CleanCARE program to help to ensure that the program is as nimble and cost-effective as possible. A third party with experience working with “disadvantaged communities,” such as Grid Alternatives, would be especially appropriate in this case. The utilities would necessarily play an important role in CleanCARE implementation and administration, as well. A framework for appropriate information-sharing between the third party and the utility would need to be put in place since the utilities have information on CARE enrollees’ locations and energy usage, and so that the utilities’ could apply appropriate bill credits to enrollees’ bills. In addition, IREC expects that CleanCARE marketing, outreach and education would be coordinated with current outreach efforts around CARE and the Energy Savings Assistance Program (ESAP), as well as the SASH and MASH programs, and that these existing efforts would be leveraged to keep costs low. Marketing, outreach and education efforts should also be coordinated with community-based organizations. Such marketing, education and outreach efforts should include education for participants in reading and understanding their electricity bills. In addition, a workforce development component could be incorporated into the program to maximize the benefit to disadvantaged communities.

**Standard retail rates:** In contrast to CARE participants, CleanCARE enrollees would remain on or be transferred to their utility’s standard residential rate structure instead of receiving discounted rates. Access to affordable electricity would be achieved by reduced overall energy *bills* through kWh bill credits, rather than reduction in energy *rates*. This shift would be an important improvement over the current CARE program because it would provide CleanCARE participants with greater information concerning the cost of their energy consumption, thereby increasing their ability to manage their energy costs directly based on consistent pricing signals over the longer term—both during enrollment in the CleanCARE program and after they have exited the program. In particular, the CleanCARE program would encourage participating customers to conserve energy, for example through energy efficiency implementation, since their remaining consumption not offset by bill credits would be at the higher standard rate than the reduced CARE rate. This is particularly important because many current CARE enrollees are only temporarily within the program but energy cost management decisions can continue to provide benefits after departing the program.

**Shared distributed generation:** The renewable distributed generation provided under CleanCARE would be from eligible renewable energy resources procured by the utilities and take the form of shared renewable generation of at least two types:

- Some percentage of facilities (e.g., 30 percent) would be smaller-scale generation (e.g., 1 – 100 kW) located within “disadvantaged communities,” and would include rooftop or small ground-mounted solar and potentially small-scale wind.

- The remaining capacity would be larger-scale renewable distributed generation (e.g., 100 kW – 5 MW) located in optimal locations on the electricity grid, as determined by the local distribution utility. These larger facilities, like the smaller facilities, would be located within disadvantaged communities.

Residents and other stakeholders from within the “disadvantaged communities” should be able to provide input regarding any facilities located in those communities. This would involve outreach to citizen activists, groups, and/or local governments, and would occur through various forums, including local meetings, Commission-sponsored forums, and/or through solar developer-led outreach, potentially in response to particular requirements in the procurement process as discussed below.

Utilizing shared renewable generation would allow for economies of scale on a programmatic basis by facilitating the installation of systems larger than those seen in on-site programs. At the same time, the “shared” aspect of these facilities can accommodate the participation of customers in the CARE program for a relatively short period of time, very likely shorter than a typical 20- or 25-year renewable energy contract. When a customer is no longer CARE-eligible and leaves the program, a new customer could participate drawn from a wait list maintained by the program administrator. Although not anticipated, if there is insufficient interest in the program, the utility could purchase excess energy and associated Renewable Energy Credits (RECs) at a substantially lower price, such as the Default Load Aggregation Point (DLAP) price plus a REC price, specified as part of the procurement process. Beginning with a small program and phasing in capacity would limit any negative effects in such a scenario. If a project were to fail for any reason, and therefore not generate energy and associated kWh bill credits, CleanCARE participants could be immediately transferred back to traditional CARE rates such that they would not experience any adverse bill impacts.

Moreover, to further address cost concerns, CleanCARE could be designed to unlock broader grid benefits by targeting areas of the grid identified by the local distribution utility as benefiting from renewable distributed generation and possibly energy storage. These benefits would flow to the local utilities’ ratepayers as a whole. In addition, relying on a fleet of CleanCARE facilities to serve all CleanCARE enrollees should help minimize risk as compared to a customer or group of customers relying on a single facility.

**Bill credit mechanism:** To realize the necessary bill reductions, CleanCARE enrollees would receive kWh bill credits associated with the shared renewable generation developed under the program. The program would ensure that their electricity bills would be offset via these kWh credits at the same level or more than they currently experience under the broader CARE program. The renewable energy would be procured by the utility using participating customers’ CARE subsidies, as discussed below; the customer would be allocated a set quantity of energy from the CleanCARE facility based on how much the CARE subsidy associated with customer’s full bill will purchase.

As shown below, with the assistance of the California Solar Energy Industries Association (CalSEIA) and other stakeholders, we have calculated the bill impacts of the CleanCARE programs in 2014 for a Tier 3 CARE-eligible customer (800 kWh per month), based on current

average CARE and non-CARE rates, and an estimated all-in cost of solar of \$0.23 per kWh. This projected cost-of-solar comprises an assumed \$0.15 for the energy, \$0.05 for transmission and distribution costs associated with the energy, and \$0.03 for administrative costs associated with the program. We also assumed a full retail rate credit (i.e., one-to-one kWh offset), as under the current NEM program. Under CleanCARE, a Tier 3 customer would see additional bill savings of \$16.84 per month, above and beyond what that customer's bill would have been under the standard CARE program.

#### **Customer Bill Savings Under CleanCARE (2014)**

|              | <b>2014 CARE</b> |                          |               |                         | <b>2014 CleanCARE</b>   |                       |                          |                       |                                   |
|--------------|------------------|--------------------------|---------------|-------------------------|-------------------------|-----------------------|--------------------------|-----------------------|-----------------------------------|
|              | Usage<br>(kWh)   | CARE<br>Rate<br>(\$/kWh) | Bill<br>(\$)  | CARE<br>Subsidy<br>(\$) | Ren.<br>Energy<br>(kWh) | Net<br>Usage<br>(kWh) | Res.<br>Rate<br>(\$/kWh) | Total<br>Bill<br>(\$) | <b>Add'l<br/>Bill<br/>Savings</b> |
| Tier 1       | 330              | 0.111                    | 36.55         | 14.70                   |                         | 330                   | 0.155                    | 51.25                 |                                   |
| Tier 2       | 100              | 0.132                    | 13.25         | 5.34                    |                         | 100                   | 0.186                    | 18.58                 |                                   |
| Tier 3       | 370              | 0.200                    | 73.91         | 36.52                   |                         | 124                   | 0.298                    | 37.04                 |                                   |
| <b>TOTAL</b> | <b>800</b>       |                          | <b>123.71</b> | <b>56.56</b>            | <b>246</b>              | <b>554</b>            |                          | <b>106.87</b>         | <b>16.84</b>                      |

Relying on a similar analysis, we estimate a bill savings of \$13.51 per month in 2018 under CleanCARE, based on anticipated average rates in 2018. For these anticipated rates, we relied on the utilities' proposals in docket R.12-06-013 (RROIR), which result in relatively conservative estimates regarding the beneficial bill impacts of CleanCARE; we expect in reality the additional bill savings would be greater. For the 2018 cost of solar, we estimated \$0.20 per kWh, given the reductions in soft costs expected but taking into account the expiration of the investment tax credit (ITC), as well. Similar to the 2014 cost of solar, the projected 2018 cost of solar comprises an assumed \$0.12 for the energy, \$0.05 for transmission and distribution costs associated with the energy, and \$0.03 for administrative costs associated with the program.

In addition, we conducted a similar analysis for a Tier 2 customer (400 kWh per month). Such a customer would see additional bill savings of \$1.90 per month in 2018 under CleanCARE. In 2014, a Tier 2 customer would have to pay an additional \$3.85 per month, which indicates that the CleanCARE pilot should be targeted to Tier 3 CARE customers, at least in the near term.

IREC emphasizes that the bill savings associated with CleanCARE are just a piece of the benefits associated with the proposed program, which also include the benefits associated with increased renewable energy generation generally and benefits of siting those facilities in "disadvantaged communities." In addition, the bill savings could be improved by incorporating energy efficiency improvements into the program to further lower a customer's bill. As discussed below, this may be more feasible as solar costs drop and a portion of the CARE funding could be transferred to energy efficiency and other demand-side management. Finally, a workforce development component to the CleanCARE program could further enhance job-related and other economic benefits to disadvantaged communities.

**Procurement:** The utilities would use a request for offer (RFO) process would be used to procure renewable generation facilities for the CleanCARE program, beginning with the initial pilot phase of 5 MW. The RFO would require that facilities be located within "disadvantaged

communities.” Similarly bidders could be required to conduct some form of outreach with those disadvantaged communities prior to submitting a bid. The Renewable Energy Credits (RECs) associated with these facilities could be sold to the utility for Renewables Portfolio Standard (RPS) compliance purposes.

It will be critical to ensure long-term funding for the CleanCARE renewable energy facilities such that the income stream derived from shifting the CARE rate subsidy would be locked in for a significant number of years (e.g., 10-20 years). Long-term funding of the CleanCARE program is essential because CleanCARE enrollees would not be “buying down” the upfront cost of their participation, as participants might in other renewable energy programs. Financiers will need to have the assurance of a long-term income stream.

**Future “clean energy package”—energy storage, energy efficiency, demand-side management:** After the initial pilot phase of the program, IREC proposes that CleanCARE would incorporate investment in a broader “clean energy package,” which would likewise be designed to achieve an equivalent or better monthly bill for CleanCARE enrollees as compared to bills they would have received under the current CARE program. In order to achieve such bill savings for CleanCARE enrollees, the “clean energy package” would incorporate energy efficiency upgrades to lower the enrollee’s overall energy consumption, in addition to the bill credits associated with participation in shared renewable energy generation.

The concept of the “clean energy package” is intentionally left flexible enough to allow for development and offering of diverse packages of targeted measures that meet the needs of CleanCARE enrollees. This flexibility should allow for packages to include an appropriate mix of energy efficiency and renewable distributed generation to achieve cost-effective bill savings for enrollees while also using energy storage and demand response to drive grid benefits. The program administrator and/or “clean energy package” offerors would be required to identify target communities, assess their energy needs, and develop a plan to meet those needs within the program parameters. Our discussions with organizations working in low-income communities on energy issues show broad support for this idea of a stable, long-term funding mechanism designed to support investment in a holistic package of services for enrollees to meet their energy needs.

The ESAP could fund energy efficiency offerings and participation in ESAP could be coordinated with the CleanCARE program enrollment process to ensure CleanCARE enrollees receive energy efficiency upgrades to reduce their consumption prior to enrollment in CleanCARE. Similarly, coordination between CleanCARE and demand response programs targeted at residential customers, such as San Diego Gas & Electric Company’s Summer Saver program, could be increased to drive overall program savings and grid benefits.

Because a “clean energy package” would introduce additional complexity into the program, IREC proposes introducing it in a later phase of the program.



## Benefits of CleanCARE

**The cornerstone of the CleanCARE program is that it would achieve at least the same beneficial bill impacts for enrollees as the current CARE program, and could empower program participants to achieve even better results.** In addition, low-income customers enrolled in CleanCARE would be able to enjoy the benefits of renewable energy generation. On-site renewable generation programs to date have typically had high cost barriers to participation and have been largely unavailable to renters. Because enrollees would be served under their utility's standard retail rates, CleanCARE would also more directly and continuously provide the same price signals as other customers, instead of masking those signals with below-cost rates. In the longer term, this should provide these customers the information about rates that they need to continue to make long-term decisions about energy conservation and efficiency.

**In addition, CleanCARE would benefit “disadvantaged communities” in at least two ways.** First, it would provide for direct participation by CARE-eligible customers in “disadvantaged communities. These customers, as well as other participating CARE-eligible customers located in other communities, would see the bill savings from participation in the CleanCARE program on their electricity bills. Second, CleanCARE would result in renewable energy development within “disadvantaged communities,” which could include both urban and rural locations. Thus although there is not complete overlap between CARE-eligible customers and customers within “disadvantaged communities,” all customers within disadvantaged communities can benefit from increased renewable generation in their communities. These include the environmental benefits of these facilities, as well as job creation and other workforce-related benefits, in particular if a job training component is incorporated into the program.

**CleanCARE should also drive down rates for all California energy consumers as it represents a more efficient use of ratepayer funds for low-income assistance.** Importantly, if implemented quickly, development of CleanCARE resources would allow California to leverage the full 30% federal Investment Tax Credit, set to decrease to 10% on Jan 1, 2017. This would result in a 30% reduction in the price of the renewable distributed generation used to serve the program along with an additional 20% reduction in cost via accelerated depreciation. Additionally, by installing renewable distributed generation at locations on the grid identified by utilities as benefiting from DG, CleanCARE would maximize grid benefits from the program, which in turn should help to drive down all energy customers' rates over time.

**Beyond these benefits, the modifications to the CARE program embodied in CleanCARE are aligned with California's overall renewable energy goals.** These include the Commission's loading order, the 33% Renewable Portfolio Standard and the Governor's 50% renewable energy and 12,000-MW distributed generation goals.